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HANSEN, C. J. Oscillation Spectra of Neutron Stars with Strong Magnetic Fields. *B. W. Carroll, E. G. Zweibel, C. J. Hansen, P. N. McDermott, M. P. Savedoff, J. H. Thomas, and H. M. Van Horn*. **305**, 767, 77-C9 (1986)
HARNDEN, F. R., JR. Modeling of Coronal X-Ray Emission from Active Cool Stars. I. Hyades Cluster. *Robert A. Stern, Spiro K. Antiochos, and F. R. Harnden, Jr.* **305**, 417, 71-F8 (1986)
HARTMANN, LEE W. Chromospheric Activity, Kinematics, and Metallicities of Nearby M Dwarfs (Abstract of Paper in 1986 July Suppl.). *John R. Stauffer and Lee W. Hartmann*. **305**, 957, 79-D13 (1986)
HASCHICK, AUBREY D. Formation of OB Clusters: Radiation-driven Implosion? *Paul T. P. Ho, Richard I. Klein, and Aubrey D. Haschick*. **305**, 714, 76-F3 (1986)
Formaldehyde Absorption and Maser Emission in Galaxies. *Willem A. Baan, Rolf Güsten, and Aubrey D. Haschick*. **305**, 830, 78-A8 (1986)
HASEGAWA, T. The Structure of the W49A Molecular Cloud Complex: Burst of Star Formation in the 10^5 $M_\odot$ Core. *R. Miyawaki, M. Hayashi, and T. Hasegawa*. **305**, 353, 71-A13 (1986)
HAYASHI, M. The Structure of the W49A Molecular Cloud Complex: Burst of Star Formation in the 10^5 $M_\odot$ Core. *R. Miyawaki, M. Hayashi, and T. Hasegawa*. **305**, 353, 71-A13 (1986)
HEALY, A. P. CO in the Helix Nebula. *P. J. Huggins and A. P. Healy*. **305**, L29, 74-C2 (1986)
HEASLEY, J. N. The Open Cluster NGC 2158: Erratum. *Carol A. Christian, J. N. Heasley, and Kenneth A. Janes*. **305**, 954, 79-D10 (1986) (Orig. paper in **299**, 683, 135-C13)
HECHT, J. H. A Physical Model for the 2175 Å Interstellar Extinction Feature. *J. H. Hecht*. **305**, 817, 77-G6 (1986)
HECKERT, PAUL A. The Optical and Near-Infrared Polarization Properties of the OVV Quasar 3C 345. *Paul S. Smith, Thomas J. Balonek, Paul A. Heckert, and Richard Elston*. **305**, 484, 72-D7 (1986)
HECKMAN, T. M. Molecular Gas in the Type 1 Seyfert Galaxy NGC 7469: Implications for Nuclear Activity. *T. M. Heckman, S. Beckwith, L. Blitz, M. Skrutskie, and A. S. Wilson*. **305**, 157, 68-F2 (1986)
HENRIKSEN, R. N. A Pulsed Jet As the Source of Momentum in Bipolar Molecular Outflows. *S.-U. Choe and R. N. Henriksen*. **305**, 131, 68-D5 (1986)
HENSON, G. D. SS 433: A 6 Year Photometric Record. *J. C. Kemp, G. D. Henson, D. J. Kraus, L. C. Carroll, I. S. Beardsley, K. Takagishi, J. Jugaku, M. Matsuoka, E. M. Leibowitz, T. Mazeh, and H. Mendelson*. **305**, 805, 77-F7 (1986)
HJELLMING, R. M. Radio Observations of the 1985 Outburst of RS Ophiuchi. *R. M. Hjellming, J. H. van Gorkom, E. R. Seaquist, A. R. Taylor, S. Padin, R. J. Davis, and M. F. Bode*. **305**, L71, 80-D9 (1986)
HO, PAUL T. P. Formation of OB Clusters: Radiation-driven Implosion? *Paul T. P. Ho, Richard I. Klein, and Aubrey D. Haschick*. **305**, 714, 76-F3 (1986)
The Kinematic Temperature Gradient and the Structure of a Thin Molecular Disk in Cepheus A. *José M. Torrelles, Paul T. P. Ho, Luis F. Rodriguez, and Jorge Cantó*. **305**, 721, 76-F10 (1986)
HOFFMAN, YEHUDA. The decaying Particles Scenario and the Virgocentric Infall. *Yehuda Hoffman*. **305**, L1, 74-A4 (1986)
HOLCOMB, KATHERINE A. New Results in the Optics of Grains with Resonant Impurities. *Paul R. Shapiro and Katherine A. Holcomb*. **305**, 433, 71-G11 (1986)
HOLT, S. S. X-Ray Spectroscopy of Five BL Lacertae Objects. *C. M. Urry, R. F. Mushotzky, and S. S. Holt*. **305**, 369, 71-C1 (1986)
HU, ESTHER M. Kinematic Evidence of Satellite Galaxy Populations in the Potential Wells of First-ranked Cluster Galaxies. *Lennox L. Cowie and Esther M. Hu*. **305**, L39, 80-B7 (1986)
HUBENÝ, I. Redistribution of Radiation in the Presence of Velocity-Changing Collisions. *I. Hubený and J. Cooper*. **305**, 852, 78-C3 (1986)
HUGGINS, P. J. CO in the Helix Nebula. *P. J. Huggins and A. P. Healy*. **305**, L29, 74-C2 (1986)
HUNSTEAD, R. W. Absorption Spectrum of the $z = 3.78$ QSO 2000 − 330. I. The Lyman-Alpha Forest Region at 1.5 Å Resolution. *R. W. Hunstead, H. S. Murdoch, B. A. Peterson, J. C. Blades, D. L. Jauncey, A. E. Wright, M. Pettini, and A. Savage*. **305**, 496, 72-E8 (1986)
HUNTER, JAMES H., JR. Star Formation in Colliding Gas Flows. *James H. Hunter, Jr., Maxwell T. Sandford II, Rodney W. Whitaker, and Richard I. Klein*. **305**, 309, 70-D4 (1986)
HUT, P. A Phenomenological Triple Star Scenario for SS 433. *A. C. Fabian, P. P. Eggleton, P. Hut, and J. E. Pringle*. **305**, 333, 70-F11 (1986)

IBEN, ICKO, JR. On the Behavior of Double Degenerate Binaries Associated with Type I Supernovae. *A. G. W. Cameron and Icko Iben, Jr.* **305**, 228, 69-D14 (1986)

JACOBSON, ALLAN S. The Gamma-Ray Spectrum of the Galactic Center Region: Erratum. *Guenter R. Riegler, James C. Ling, William A. Mahoney, Wm. A. Wheaton, and Allan S. Jacobson*. **305**, L33, 74-C6 (1986) (Orig. paper in **294**, L13, 71-E12)

JANES, KENNETH A. The Open Cluster NGC 2158: Erratum. *Carol A. Christian, J. N. Heasley, and Kenneth A. Janes*. **305**, 954, 79-D10 (1986) (Orig. paper in **299**, 683, 135-C13)

JAUNCEY, D. L. Absorption Spectrum of the $z = 3.78$ QSO 2000 − 330. I. The Lyman-Alpha Forest Region at 1.5 Å Resolution. *R. W. Hunstead, H. S. Murdoch, B. A. Peterson, J. C. Blades, D. L. Jauncey, A. E. Wright, M. Pettini, and A. Savage*. **305**, 496, 72-E8 (1986)

JENSEN, LARS GERHARD. *N*-Point Correlations for Biased Galaxy Formation. *Lars Gerhard Jensen and Alexander S. Szalay*. **305**, L5, 74-A8 (1986)

JOKISCH, H. Searches for Narrow-Angle Anisotroies in the Primary Energy Range 0.1–10 TeV: Erratum. *O. C. Allkofer, W. D. Dau, H. Jokisch, G. Klemke, R. C. Uhr, G. Bella, and Y. Oren*. **305**, 954, 79-D10 (1986) (Orig. paper in **291**, 468, 40-A2)

JONES, DAYTON L., *et al.* High Dynamic Range VLBI Observations of NGC 6251. *Dayton L. Jones, S. C. Unwin, A. C. S. Readhead, W. L. W. Sargent, G. A. Seielstad, R. S. Simon, R. C. Walker, J. M. Benson, R. A. Perley, A. H. Bridle, I. I. K. Pauliny-Toth, J. Romney, A. Witzel, P. N. Wilkinson, L. B. Bååth, R. S. Booth, D. N. Fort, J. A. Galt, R. L. Mutel, and R. P. Linfield*. **305**, 684, 76-D1 (1986)

JOSS, P. C. Optical Reprocessing of Gamma-Ray Bursts. *F. Melia, S. Rappaport, and P. C. Joss*. **305**, L51, 80-C4 (1986)

JUGAKU, J. SS 433: A 6 Year Photometric Record. *J. C. Kemp, G. D. Henson, D. J. Kraus, L. C. Carroll, I. S. Beardsley, K. Takagishi, J. Jugaku, M. Matsuoka, E. M. Leibowitz, T. Mazeh, and H. Mendelson*. **305**, 805, 77-F7 (1986)

KAHN, STEVEN M. *Einstein* Observations of the Soft X-Ray Background Close to the Galactic Plane. *Steven M. Kahn and Jean-Pierre Caillault*. **305**, 526, 73-A10 (1986)

KANE, S. R. Solar Gradual Hard X-Ray Bursts and Associated Phenomena. *E. W. Cliver, B. R. Dennis, A. L. Kiplinger, S. R. Kane, D. F. Neidig, N. R. Sheeley, Jr., and M. J. Koomen*. **305**, 920, 79-A12 (1986)

KAPRANIDIS, STELIOS. The Chemical Composition of the Cool White Dwarf LP 701-29. *Stelios Kapranidis and James Liebert*. **305**, 863, 78-C14 (1986)

KEEL, WILLIAM C. Ultraviolet Spectrophotometry of Three LINERs. *Robert W. Goodrich and William C. Keel*. **305**, 148, 68-E7 (1986)

KEMP, J. C. SS 433: A 6 Year Photometric Record. *J. C. Kemp, G. D. Henson, D. J. Kraus, L. C. Carroll, I. S. Beardsley, K. Takagishi, J. Jugaku, M. Matsuoka, E. M. Leibowitz, T. Mazeh, and H. Mendelson*. **305**, 805, 77-F7 (1986)

KING, IVAN R. A Preliminary Survey of Collapsed Cores in Globular Clusters. *S. Djorgovski and Ivan R. King*. **305**, L61, 80-C13 (1986)

KIPLINGER, A. L. Solar Gradual Hard X-Ray Bursts and Associated Phenomena. *E. W. Cliver, B. R. Dennis, A. L. Kiplinger, S. R. Kane, D. F. Neidig, N. R. Sheeley, Jr., and M. J. Koomen*. **305**, 920, 79-A12 (1986)

KIRSHNER, ROBERT P. Dynamics of the Elliptical Galaxy NGC 7097 Measured from Gas and Stars. *Nelson Caldwell, Robert P. Kirshner, and Douglas O. Richstone*. **305**, 136, 68-D10 (1986)

KLEIN, RICHARD I. Star Formation in Colliding Gas Flows. *James H. Hunter, Jr., Maxwell T. Sandford II, Rodney W. Whitaker, and Richard I. Klein*. **305**, 309, 70-D4 (1986)

Formation of OB Clusters: Radiation-driven Implosion? *Paul T. P. Ho, Richard I. Klein, and Aubrey D. Haschick*. **305**, 714, 76-F3 (1986)

KLEMKE, G. Searches for Narrow-Angle Anisotroies in the Primary Energy Range 0.1–10 TeV: Erratum. *O. C. Allkofer, W. D. Dau, H. Jokisch, G. Klemke, R. C. Uhr, G. Bella, and Y. Oren*. **305**, 954, 79-D10 (1986) (Orig. paper in **291**, 468, 40-A2)

KONDO, Y. The Ultraviolet Spectrum of Procyon. I. The Atlas from 2030 to 2371 Å (Abstract of Paper in 1986 July Suppl.). *R. Faraggiana, F. Castelli, C. Morossi, Y. Kondo, and K. A. van der Hucht*. **305**, 956, 79-D12 (1986)

KÖNIGL, ARIEH. Force-free Equilibria of Magnetized Jets: Erratum. *Arieh Königl and Arnab Rai Choudhuri*. **305**, 954, 79-D10 (1986) (Orig. paper in **289**, 173, 14-F14)

KOOMEN, M. J. Solar Gradual Hard X-Ray Bursts and Associated Phenomena. *E. W. Cliver, B. R. Dennis, A. L. Kiplinger, S. R. Kane, D. F. Neidig, N. R. Sheeley, Jr., and M. J. Koomen*. **305**, 920, 79-A12 (1986)

KRAUS, D. J. SS 433: A 6 Year Photometric Record. *J. C. Kemp, G. D. Henson, D. J. Kraus, L. C. Carroll, I. S. Beardsley, K. Takagishi, J. Jugaku, M. Matsuoka, E. M. Leibowitz, T. Mazeh, and H. Mendelson*. **305**, 805, 77-F7 (1986)

KRISTIAN, JEROME. The Stellar Population in the Halos of M31 and M33. *Jeremy Mould and Jerome Kristian*. **305**, 591, 75-C9 (1986)

KURUCZ, ROBERT L. Theoretical *ubvyβ* Indices (Abstract of Paper in 1986 July Suppl.). *John B. Lester, Richard O. Gray, and Robert L. Kurucz*. **305**, 957, 79-D13 (1986)

KWAN, JOHN. On the Correlation between X-Ray Flux and Hydrogen Line Intensities in Quasars and Active Galactic Nuclei. *John Kwan*. **305**, 679, 76-C8 (1986)

LANDMAN, DONALD A. Physical Conditions in the Cool Parts of Prominences and Spicules: The Effects of Model Atom Level Truncation on the Derived Plasma Parameters. *Donald A. Landman*. **305**, 546, 73-C2 (1986)

LANG, KENNETH R. Millisecond Radio Spikes from the Dwarf M Flare Star AD Leonis. *Kenneth R. Lang and Robert F. Willson*. **305**, 363, 71-B9 (1986)

LATHAM, DAVID W. Stellar Velocity Dispersions for Four Low-Concentration Globular Clusters. *Ruth C. Peterson and David W. Latham*. **305**, 645, 76-A1 (1986)

LAUE, H. Acceleration of Protons and Electrons in the Electromagnetic Field of a Rotating Orthogonal Magnetic Dipole (Abstract of Paper in 1986 July Suppl.). *H. Laue and K. L. Thielheim*. **305**, 955, 79-D11 (1986)

LECAR, MYRON. A Numerical Simulation of the Formation of the Terrestrial Planets. *Myron Lecar and Sverre J. Aarseth*. **305**, 564, 73-D6 (1986)

LEIBOWITZ, E. M. SS 433: A 6 Year Photometric Record. *J. C. Kemp, G. D. Henson, D. J. Kraus, L. C. Carroll, I. S. Beardsley, K. Takagishi, J. Jugaku, M. Matsuoka, E. M. Leibowitz, T. Mazeh, and H. Mendelson*. **305**, 805, 77-F7 (1986)

LEOPOLD, K. R. The Microwave and Far-Infrared Spectra of the ^{18}OH Radical. *E. R. Comben, J. M. Brown, T. C. Steimle, K. R. Leopold, and K. M. Evenson*. **305**, 513, 72-G9 (1986)

LESTER, JOHN B. Theoretical *ubvyβ* Indices (Abstract of Paper in 1986 July Suppl.). *John B. Lester, Richard O. Gray, and Robert L. Kurucz*. **305**, 957, 79-D13 (1986)

LIEBERT, JAMES. High-Resolution Hα Observations of M Dwarf Stars: Implications for Stellar Dynamo Models and Stellar Kinematic Properties at Faint Magnitudes. *Mark S. Giampapa and James Liebert*. **305**, 784, 77-D12 (1986)

The Chemical Composition of the Cool White Dwarf LP 701-29. *Stelios Kapranidis and James Liebert*. **305**, 863, 78-C14 (1986)

LIN, D. N. C. Accretion Disks and Periodic Outbursts of Active Galaxies Nuclei. *D. N. C. Lin and G. A. Shields*. **305**, 28, 67-C6 (1986)

LINFIELD, R. P. see JONES, DAYTON L., *et al.*

LING, JAMES C. The Gamma-Ray Spectrum of the Galactic Center Region: Erratum. *Guenter R. Riegler, James C. Ling, William A. Mahoney, Wm. A. Wheaton, and Allan S. Jacobson*. **305**, L33, 74-C6 (1986) (Orig. paper in **294**, L13, 71-E12)

LIVIO, MARIO. On the Stream-Disk Interaction in Accreting Compact Objects. *Mario Livio, Noam Soker, and Ruth Dgani*. **305**, 267, 69-G11 (1986)

MACDONALD, JIM. Postthermonuclear Runaway Angular Momentum Loss in Cataclysmic Binaries. *Jim MacDonald*. **305**, 251, 69-F9 (1986)

MADORE, BARRY F. The Distance to M31 from Infrared Photometry of Its Cepheids. *Douglas L. Welch, Christopher W. McAlary, Robert A. McLaren, and Barry F. Madore*. **305**, 583, 75-C1 (1986)

MAHONEY, WILLIAM A. The Gamma-Ray Spectrum of the Galactic Center Region: Erratum. *Guenter R. Riegler, James C. Ling, William A. Mahoney, Wm. A. Wheaton, and Allan S. Jacobson*. **305**, L33, 74-C6 (1986) (Orig. paper in **294**, L13, 71-E12)

MARTIN, F. New Observations of Alpha Orionis with a Rotation Shearing Interferometer. *F. Roddier, C. Roddier, R. Petrov, F. Martin, G. Ricort, and C. Aime*. **305**, L77, 80-D13 (1986)

MATHEWS, WILLIAM G. Structure and Stability of Quasar Clouds. *William G. Mathews*. **305**, 187, 69-A5 (1986)

MATSUOKA, M. SS 433: A 6 Year Photometric Record. *J. C. Kemp, G. D. Henson, D. J. Kraus, L. C. Carroll, I. S. Beardsley, K. Takagishi, J. Jugaku, M. Matsuoka, E. M. Leibowitz, T. Mazeh, and H. Mendelson*. **305**, 805, 77-F7 (1986)

MATTEUCCI, FRANCESCA. The Effect of the New $^{12}C(\alpha,\gamma)^{16}O$ Rate on the Chemical Evolution of the Solar Neighborhood. *Francesca Matteucci*. **305**, L81, 80-E3 (1986)

MAZEH, T. SS 433: A 6 Year Photometric Record. *J. C. Kemp, G. D. Henson, D. J. Kraus, L. C. Carroll, I. S. Beardsley, K. Takagishi, J. Jugaku, M. Matsuoka, E. M. Leibowitz, T. Mazeh, and H. Mendelson*. **305**, 805, 77-F7 (1986)

MCALARY, CHRISTOPHER W. The Distance to M31 from Infrared Photometry of Its Cepheids. *Douglas L. Welch, Christopher W. McAlary, Robert A. McLaren, and Barry F. Madore*. **305**, 583, 75-C1 (1986)

MCCLYMONT, A. N. The Solar Flare Extreme Ultraviolet to Hard X-Ray Ratio. *A. N. McClymont and Richard C. Canfield*. **305**, 936, 79-C1 (1986)

MCDERMOTT, P. N. Oscillation Spectra of Neutron Stars with Strong Magnetic Fields. *B. W. Carroll, E. G. Zweibel, C. J. Hansen, P. N. McDermott, M. P. Savedoff, J. H. Thomas, and H. M. Van Horn*. **305**, 767, 77-C9 (1986)

MCGREGOR, PETER J. Images of Star-Forming Regions. I. Optical and Radio Morphology of the Bipolar Outflow Source GL 490. *Bel Campbell, S. E. Persson, and Peter J. McGregor*. **305**, 336, 70-F14

(1986)
McLAREN, ROBERT A. The Distance to M31 from Infrared Photometry of Its Cepheids. *Douglas L. Welch, Christopher W. McAlary, Robert A. McLaren, and Barry F. Madore*. **305**, 583, 75-C1 (1986)
MELIA, F. Optical Reprocessing of Gamma-Ray Bursts. *F. Melia, S. Rappaport, and P. C. Joss*. **305**, L51, 80-C4 (1986)
MELOTT, ADRIAN L. An Independent Test of Biased Galaxy Formation with Cold Particles: The Three-Point Function. *Adrian L. Melott and J. N. Fry*. **305**, 1, 67-A7 (1986)
MENDELSON, H. SS 433: A 6 Year Photometric Record. *J. C. Kemp, G. D. Henson, D. J. Kraus, L. C. Carroll, I. S. Beardsley, K. Takagishi, J. Jugaku, M. Matsuoka, E. M. Leibowitz, T. Mazeh, and H. Mendelson*. **305**, 805, 77-F7 (1986)
MILLER, JACK. Nonlinear Convection of a Compressible Fluid in a Rotating Spherical Shell (Abstract of Paper in 1986 July Suppl.). *Peter A. Golman and Jack Miller*. **305**, 958, 79-D14 (1986)
MIYAWAKI, R. The Structure of the W49A Molecular Cloud Complex: Burst of Star Formation in the 10^5 $M_\odot$ Core. *R. Miyawaki, M. Hayashi, and T. Hasegawa*. **305**, 353, 71-A13 (1986)
MOOS, H. W. Experimental Evidence for the Effect of Resonance Structures on Electron Excitation Rates for Si III. *T. L. Yu, M. Finkenthal, and H. W. Moos*. **305**, 880, 78-E3 (1986)
MOROSSI, C. The Ultraviolet Spectrum of Procyon. I. The Atlas from 2030 to 2371 Å (Abstract of Paper in 1986 July Suppl.). *R. Faraggiana, F. Castelli, C. Morossi, Y. Kondo, and K. A. van der Hucht*. **305**, 956, 79-D12 (1986)
MOULD, J. R. The Age of the Small Magellanic Cloud Globular Cluster NGC 411. *G. S. Da Costa and J. R. Mould*. **305**, 214, 69-C6 (1986)
MOULD, JEREMY. The Stellar Population in the Halos of M31 and M33. *Jeremy Mould and Jerome Kristian*. **305**, 591, 75-C9 (1986)
MURDOCH, H. S. Absorption Spectrum of the $z = 3.78$ QSO 2000 − 330. I. The Lyman-Alpha Forest Region at 1.5 Å Resolution. *R. W. Hunstead, H. S. Murdoch, B. A. Peterson, J. C. Blades, D. L. Jauncey, A. E. Wright, M. Pettini, and A. Savage*. **305**, 496, 72-E8 (1986)
MUSHOTZKY, R. F. The Detection of Distant Cooling Flows and the Formation of Dark Matter. *A. C. Fabian, K. A. Arnaud, P. E. J. Nulsen, and R. F. Mushotzky*. **305**, 9, 67-B1 (1986)
X-Ray Spectroscopy of Five BL Lacertae Objects. *C. M. Urry, R. F. Mushotzky, and S. S. Holt*. **305**, 369, 71-C1 (1986)
MUTEL, R. L. see JONES DAYTON, L., *et al.*
MYERS, P. C. The Excitation, Abundance, and Distribution of HNCO in Sagittarius B2. *E. Churchwell, D. Wood, P. C. Myers, and Roy V. Myers*. **305**, 405, 71-E10 (1986)
MYERS, ROY V. The Excitation, Abundance, and Distribution of HNCO in Sagittarius B2. *E. Churchwell, D. Wood, P. C. Myers, and Roy V. Myers*. **305**, 405, 71-E10 (1986)

NATHER, R. EDWARD. The Eclipses of Cataclysmic Variables. I. HT Cassiopeiae. *E.-H. Zhang, Edward L. Robinson, and R. Edward Nather*. **305**, 740, 77-A9 (1986)
NEIDIG, D. F. Solar Gradual Hard X-Ray Bursts and Associated Phenomena. *E. W. Cliver, B. R. Dennis, A. L. Kiplinger, S. R. Kane, D. F. Neidig, N. R. Sheeley, Jr., and M. J. Koomen*. **305**, 920, 79-A12 (1986)
NOLTHENIUS, RICHARD. The Mass and Halo Dispersion Profile of M32. *Richard Nolthenius and Holland Ford*. **305**, 600, 75-D8 (1986)
NOMOTO, KEN'ICHI. Confronting X-Ray Observations of Young Supernova Remnants with Neutron Star Cooling Models. *Ken'ichi Nomoto and Sachiko Tsuruta*. **305**, L19, 74-B7 (1986)
X-Ray Spectra of Bursting Neutron Stars and the Color Temperature versus Luminosity Diagram. *Toshikazu Ebisuzaki and Ken'ichi Nomoto*. **305**, L67, 80-D4 (1986)
NORRIS, JOHN. Carbon and M Stars in Nearby Galaxies: A Preliminary Survey Using a Photometric Technique. *Kem H. Cook, Marc Aaronson, and John Norris*. **305**, 634, 75-G1 (1986)
NULSEN, P. E. J. The Detection of Distant Cooling Flows and the Formation of Dark Matter. *A. C. Fabian, K. A. Arnaud, P. E. J. Nulsen, and R. F. Mushotzky*. **305**, 9, 67-B1 (1986)

O'CONNELL, R. F. Relativistic Kepler's Third Law. *Bruce M. Barker, Gene G. Byrd, and R. F. O'Connell*. **305**, 623, 75-F3 (1986)
OKA, TAKESHI. Calculated Forbidden Rotational Spectra of H_3^+. *Fu-Shih Pan and Takeshi Oka*. **305**, 518, 73-A1 (1986)
OREN, Y. Searches for Narrow-Angle Anisotroies in the Primary Energy Range 0.1–10 TeV: Erratum. *O. C. Allkofer, W. D. Dau, H. Jokisch, G. Klemke, R. C. Uhr, G. Bella, and Y. Oren*. **305**, 954, 79-D10 (1986) (Orig. paper in **291**, 468, 40-A2)

PADIN, S. Radio Observations of the 1985 Outburst of RS Ophiuchi. *R. M. Hjellming, J. H. van Gorkom, E. R. Seaquist, A. R. Taylor, S. Padin, R. J. Davis, and M. F. Bode*. **305**, L71, 80-D9 (1986)
PAN, FU-SHIH. Calculated Forbidden Rotational Spectra of H_3^+. *Fu-Shih Pan and Takeshi Oka*. **305**, 518, 73-A1 (1986)
PAULINY-TOTH, I. I. K. see JONES, DAYTON L., *et al.*
PERLEY, R. A. see JONES, DAYTON L., *et al.*
PERSSON, S. E. Images of Star-Forming Regions. I. Optical and Radio Morphology of the Bipolar Outflow Source GL 490. *Bel Campbell, S. E. Persson, and Peter J. McGregor*. **305**, 336, 70-F14 (1986)
PETERSON, B. A. Absorption Spectrum of the $z = 3.78$ QSO 2000 − 330. I. The Lyman-Alpha Forest Region at 1.5 Å Resolution. *R. W. Hunstead, H. S. Murdoch, B. A. Peterson, J. C. Blades, D. L. Jauncey, A. E. Wright, M. Pettini, and A. Savage*. **305**, 496, 72-E8 (1986)
PETERSON, RUTH C. Stellar Velocity Dispersions for Four Low-Concentration Globular Clusters. *Ruth C. Peterson and David W. Latham*. **305**, 645, 76-A1 (1986)
PETROV, R. New Observations of Alpha Orionis with a Rotation Shearing Interferometer. *F. Roddier, C. Roddier, R. Petrov, F. Martin, G. Ricort, and C. Aime*. **305**, L77, 80-D13 (1986)
PETTINI, M. Absorption Spectrum of the $z = 3.78$ QSO 2000 − 330. I. The Lyman-Alpha Forest Region at 1.5 Å Resolution. *R. W. Hunstead, H. S. Murdoch, B. A. Peterson, J. C. Blades, D. L. Jauncey, A. E. Wright, M. Pettini, and A. Savage*. **305**, 496, 72-E8 (1986)
PIERCE, MICHAEL J. The Structure of the Cygnus A Radio Galaxy. *Michael J. Pierce and Alan Stockton*. **305**, 204, 69-B8 (1986)
PRINGLE, J. E. A Phenomenological Triple Star Scenario for SS 433. *A. C. Fabian, P. P. Eggleton, P. Hut, and J. E. Pringle*. **305**, 333, 70-F11 (1986)
PYDEN, BARBARA S. Molecules in Galaxies. I. CO Observations in a Spiral Arm of M31. *Barbara S. Pyden and Antony A. Stark*. **305**, 823, 78-A1 (1986)

RAGA, A. C. Kinematical and Hydrodynamical Study of the HH 32 Complex. *J. Solf, K.-H. Böhm, and A. C. Raga*. **305**, 795, 77-E10 (1986)
RAPPAPORT, S. Optical Reprocessing of Gamma-Ray Bursts. *F. Melia, S. Rappaport, and P. C. Joss*. **305**, L51, 80-C4 (1986)
READHEAD, A. C. S. see JONES, DAYTON L., *et al.*
RICE, W. L. Molecular Gas in High-Luminosity *IRAS* Galaxies. *D. B. Sanders, N. Z. Scoville, J. S. Young, B. T. Soifer, F. P. Schloerb, W. L. Rice, and G. E. Danielson*. **305**, L45, 80-B12 (1986)
RICHSTONE, DOUGLAS O. Dynamics of the Elliptical Galaxy NGC 7097 Measured from Gas and Stars. *Nelson Caldwell, Robert P. Kirshner, and Douglas O. Richstone*. **305**, 136, 68-D10 (1986)
RICORT, G. New Observations of Alpha Orionis with a Rotation Shearing Interferometer. *F. Roddier, C. Roddier, R. Petrov, F. Martin, G. Ricort, and C. Aime*. **305**, L77, 80-D13 (1986)
RIEGLER, GUENTER R. The Gamma-Ray Spectrum of the Galactic Center Region: Erratum. *Guenter R. Riegler, James C. Ling, William A. Mahoney, Wm. A. Wheaton, and Allan S. Jacobson*. **305**, L33, 74-C6 (1986) (Orig. paper in **294**, L13, 71-E12)
ROBINSON, EDWARD L. On the Discordant Measurements of the Radial Velocity Curve of the Late-Type Star in the Dwarf Nova SS Cygni. *Edward L. Robinson, E.-H. Zhang, and Richard J. Stover*. **305**, 732, 77-A1 (1986)
The Eclipses of Cataclysmic Variables. I. HT Cassiopeiae. *E.-H. Zhang, Edward L. Robinson, and R. Edward Nather*. **305**, 740, 77-A9 (1986)
RODDIER, C. New Observations of Alpha Orionis with a Rotation Shearing Interferometer. *F. Roddier, C. Roddier, R. Petrov, F. Martin, G. Ricort, and C. Aime*. **305**, L77, 80-D13 (1986)
RODDIER, F. New Observations of Alpha Orionis with a Rotation Shearing Interferometer. *F. Roddier, C. Roddier, R. Petrov, F. Martin, G. Ricort, and C. Aime*. **305**, L77, 80-D13 (1986)
RODRÍGUEZ, LUIS F. The Kinematic Temperature Gradient and the Structure of a Thin Molecular Disk in Cepheus A. *José M. Torrelles, Paul T. P. Ho, Luis F. Rodriguez, and Jorge Cantó*. **305**, 721, 76-F10 (1986)
ROMNEY, J. see JONES, DAYTON L., *et al.*
ROSS, RANDY R. Radiative Transfer in Circumstellar 1612 MHz OH Masers. *Charles Alcock and Randy R. Ross*. **305**, 837, 78-B2 (1986)
RUBIN, VERA C. Is the Distribution of Mass within Spiral Galaxies a Function of Galaxy Environment? *David Burstein, Vera C. Rubin, W. Kent Ford, Jr., and Bradley C. Whitmore*. **305**, L11, 74-A13 (1986)
On the Ratio of [N II]/Hα in the Nucleus of M33 and in the Nuclei of Other Galaxies. *Vera C. Rubin and W. Kent Ford, Jr.* **305**, L35, 80-B1 (1986)

SANDERS, D. B. Molecular Gas in High-Luminosity *IRAS* Galaxies. *D. B. Sanders, N. Z. Scoville, J. S. Young, B. T. Soifer, F. P. Schloerb, W. L. Rice, and G. E. Danielson*. **305**, L45, 80-B12 (1986)
SANDFORD, MAXWELL T., II. Star Formation in Colliding Gas Flows. *James H. Hunter, Jr., Maxwell T. Sandford II, Rodney W. Whitaker, and Richard I. Klein*. **305**, 309, 70-D4 (1986)
SANTANGELO, PAOLO. The Dynamical Evolution of Clusters of Galaxies. *Alfonso Cavaliere, Paolo Santangelo, Giuseppe Tarquini, and Nicola*

Vittorio. **305**, 651, 76-A7 (1986)
SARGENT, W. L. W. see JONES, DAYTON L., *et al.*
SAVAGE, A. Absorption Spectrum of the $z = 3.78$ QSO 2000 − 330. I. The Lyman-Alpha Forest Region at 1.5 Å Resolution. *R. W. Hunstead, H. S. Murdoch, B. A. Peterson, J. C. Blades, D. L. Jauncey, A. E. Wright, M. Pettini, and A. Savage*. **305**, 496, 72-E8 (1986)
SAVEDOFF, M. P. Oscillation Spectra of Neutron Stars with Strong Magnetic Fields. *B. W. Carroll, E. G. Zweibel, C. J. Hansen, P. N. McDermott, M. P. Savedoff, J. H. Thomas, and H. M. Van Horn*. **305**, 767, 77-C9 (1986)
SAYKALLY, RICHARD J. Direct Measurement of the Fine-Structure Interval and g_J Factors of Singly Ionized Atomic Carbon by Laser Magnetic Resonance. *Andrew L. Cooksy, Geoffrey A. Blake, and Richard J. Saykally*. **305**, L89, 80-E11 (1986)
SCHLICKEISER, REINHARD. Particle Acceleration in Solar Flares. *Wolfgang Dröge and Reinhard Schlickeiser*. **305**, 909, 79-A1 (1986)
SCHLOERB, F. P. Molecular Gas in High-Luminosity *IRAS* Galaxies. *D. B. Sanders, N. Z. Scoville, J. S. Young, B. T. Soifer, F. P. Schloerb, W. L. Rice, and G. E. Danielson*. **305**, L45, 80-B12 (1986)
SCHMIDT, MAARTEN. X-Ray Observations of the Bright Quasar Survey. *H. Tananbaum, Y. Avni, Richard F. Green, Maarten Schmidt, and G. Zamorani*. **305**, 57, 67-E7 (1986)
Counts, Evolution, and Background Contribution of X-Ray Quasars and Other Extragalactic X-Ray Sources. *Maarten Schmidt and Richard F. Green*. **305**, 68, 67-F4 (1986)
SCHNEIDER, STEPHEN E. Detection of Atomic Hydrogen in the Young Planetary Nebula IC 4997. *Daniel R. Altschuler, Stephen E. Schneider, Carlo Giovanardi, and Peter R. Silverglate*. **305**, L85, 80-E7 (1986)
SCOVILLE, N. Z. Molecular Gas in High-Luminosity *IRAS* Galaxies. *D. B. Sanders, N. Z. Scoville, J. S. Young, B. T. Soifer, F. P. Schloerb, W. L. Rice, and G. E. Danielson*. **305**, L45, 80-B12 (1986)
SEAQUIST, E. R. Radio Observations of the 1985 Outburst of RS Ophiuchi. *R. M. Hjellming, J. H. van Gorkom, E. R. Seaquist, A. R. Taylor, S. Padin, R. J. Davis, and M. F. Bode*. **305**, L71, 80-D9 (1986)
SEIELSTAD, G. A. see JONES, DAYTON L., *et al.*
SELLGREN, K. Ultraviolet-pumped Infrared Fluorescent Molecular Hydrogen Emission in Reflection Nebulae. *K. Sellgren*. **305**, 399, 71-E4 (1986)
SEWARD, F. D. A 6 Second Periodic X-Ray Source in Carina. *F. D. Seward, P. A. Charles, and A. P. Smale*. **305**, 814, 77-G2 (1986)
SHAFTER, A. W. Mass Transfer in Cataclysmic Variables: Clues from the Dwarf Nova Period Distribution. *A. W. Shafter, J. C. Wheeler, and J. K. Cannizzo*. **305**, 261, 69-G5 (1986)
SHAPIRO, PAUL R. New Results in the Optics of Grains with Resonant Impurities. *Paul R. Shapiro and Katherine A. Holcomb*. **305**, 433, 71-G11 (1986)
SHEELEY, N. R., JR. Solar Gradual Hard X-Ray Bursts and Associated Phenomena. *E. W. Cliver, B. R. Dennis, A. L. Kiplinger, S. R. Kane, D. F. Neidig, N. R. Sheeley, Jr., and M. J. Koomen*. **305**, 920, 79-A12 (1986)
SHIELDS, G. A. Accretion Disks and Periodic Outbursts of Active Galaxies Nuclei. *D. N. C. Lin and G. A. Shields*. **305**, 28, 67-C6 (1986)
SILVERGLATE, PETER R. Detection of Atomic Hydrogen in the Young Planetary Nebula IC 4997. *Daniel R. Altschuler, Stephen E. Schneider, Carlo Giovanardi, and Peter R. Silverglate*. **305**, L85, 80-E7 (1986)
SIMON, R. S. see JONES, DAYTON L., *et al.*
SKRUTSKIE, M. Molecular Gas in the Type 1 Seyfert Galaxy NGC 7469: Implications for Nuclear Activity. *T. M. Heckman, S. Beckwith, L. Blitz, M. Skrutskie, and A. S. Wilson*. **305**, 157, 68-F2 (1986)
SMALE, A. P. A 6 Second Periodic X-Ray Source in Carina. *F. D. Seward, P. A. Charles, and A. P. Smale*. **305**, 814, 77-G2 (1986)
SMITH, PAUL S. The Optical and Near-Infrared Polarization Properties of the OVV Quasar 3C 345. *Paul S. Smith, Thomas J. Balonek, Paul A. Heckert, and Richard Elston*. **305**, 484, 72-D7 (1986)
SOIFER, B. T. Molecular Gas in High-Luminosity *IRAS* Galaxies. *D. B. Sanders, N. Z. Scoville, J. S. Young, B. T. Soifer, F. P. Schloerb, W. L. Rice, and G. E. Danielson*. **305**, L45, 80-B12 (1986)
SOKER, NOAM. On the Stream-Disk Interaction in Accreting Compact Objects. *Mario Livio, Noam Soker, and Ruth Dgani*. **305**, 267, 69-G11 (1986)
SOLF, J. Kinematical and Hydrodynamical Study of the HH 32 Complex. *J. Solf, K.-H. Böhm, and A. C. Raga*. **305**, 795, 77-E10 (1986)
SPARKE, LINDA S. Line Variations in Quasars and Seyfert Galaxies. *C. Martin Gaskell and Linda S. Sparke*. **305**, 175, 68-G7 (1986)
STARK, ANTONY A. Molecules in Galaxies. I. CO Observations in a Spiral Arm of M31. *Barbara S. Pyden and Antony A. Stark*. **305**, 823, 78-A1 (1986)
STAUFFER, JOHN R. Chromospheric Activity, Kinematics, and Metallicities of Nearby M Dwarfs (Abstract of Paper in 1986 July Suppl.). *John R. Stauffer and Lee W. Hartmann*. **305**, 957, 79-D13 (1986)
STECHER, THEODORE P. Detection of Scattering in the 2175 Å Interstellar Band. *Adolf N. Witt, Ralph C. Bohlin, and Theodore P. Stecher*. **305**, L23, 74-B11 (1986)
STEIMLE, T. C. The Microwave and Far-Infrared Spectra of the ^{18}OH Radical. *E. R. Comben, J. M. Brown, T. C. Steimle, K. R. Leopold, and K. M. Evenson*. **305**, 513, 72-G9 (1986)
STERN, ROBERT A. Modeling of Coronal X-Ray Emission from Active Cool Stars. I. Hyades Cluster. *Robert A. Stern, Spiro K. Antiochos, and F. R. Harnden, Jr.* **305**, 417, 71-F8 (1986)
STOCKTON, ALAN. The Structure of the Cygnus A Radio Galaxy. *Michael J. Pierce and Alan Stockton*. **305**, 204, 69-B8 (1986)
STOVER, RICHARD J. On the Discordant Measurements of the Radial Velocity Curve of the Late-Type Star in the Dwarf Nova SS Cygni. *Edward L. Robinson, E.-H. Zhang, and Richard J. Stover*. **305**, 732, 77-A1 (1986)
STÜWE, J. A. The Projected Dark Cloud Distribution of the Milky Way. *J. V. Feitzinger and J. A. Stüwe*. **305**, 534, 73-B4 (1986)
SUTHERLAND, P. G. Accretion onto Neutron Stars with the Presence of a Double Layer. *A. C. Williams, M. C. Weisskopf, R. F. Elsner, W. Darbro, and P. G. Sutherland*. **305**, 759, 77-C1 (1986)
SZALAY, ALEXANDER S. *N*-Point Correlations for Biased Galaxy Formation. *Lars Gerhard Jensen and Alexander S. Szalay*. **305**, L5, 74-A8 (1986)

TAAM, RONALD E. Magnetic Field Decay and the Origin of Neutron Star Binaries. *Ronald E. Taam and E. P. J. van den Heuvel*. **305**, 235, 69-E7 (1986)
The Mass and Radius of a Neutron Star in X-Ray Burster MXB 1636 − 536. *Masayuki Y. Fujimoto and Ronald E. Taam*. **305**, 246, 69-F4 (1986)
TAKAGISHI, K. SS 433: A 6 Year Photometric Record. *J. C. Kemp, G. D. Henson, D. J. Kraus, L. C. Carroll, I. S. Beardsley, K. Takagishi, J. Jugaku, M. Matsuoka, E. M. Leibowitz, T. Mazeh, and H. Mendelson*. **305**, 805, 77-F7 (1986)
TANANBAUM, H. X-Ray Observations of the Bright Quasar Survey. *H. Tananbaum, Y. Avni, Richard F. Green, Maarten Schmidt, and G. Zamorani*. **305**, 57, 67-E7 (1986)
X-Ray Properties of Optically Selected QSOs. *Y. Avni and H. Tananbaum*. **305**, 83, 67-G5 (1986)
TARQUINI, GIUSEPPE. The Dynamical Evolution of Clusters of Galaxies. *Alfonso Cavaliere, Paolo Santangelo, Giuseppe Tarquini, and Nicola Vittorio*. **305**, 651, 76-A7 (1986)
TARTER, J. C. A Cloud Collision Model for Water Maser Excitation. *J. C. Tarter and William J. Welch*. **305**, 467, 72-C4 (1986)
TAYLOR, A. R. Radio Observations of the 1985 Outburst of RS Ophiuchi. *R. M. Hjellming, J. H. van Gorkom, E. R. Seaquist, A. R. Taylor, S. Padin, R. J. Davis, and M. F. Bode*. **305**, L71, 80-D9 (1986)
THADDEUS, P. The Largest Molecular Cloud Complexes in the First Galactic Quadrant. *T. M. Dame, B. G. Elmegreen, R. S. Cohen, and P. Thaddeus*. **305**, 892, 78-F1 (1986)
THIELHEIM, K. L. Acceleration of Protons and Electrons in the Electromagnetic Field of a Rotating Orthogonal Magnetic Dipole (Abstract of Paper in 1986 July Suppl.). *H. Laue and K. L. Thielheim*. **305**, 955, 79-D11 (1986)
THOMAS, J. H. Oscillation Spectra of Neutron Stars with Strong Magnetic Fields. *B. W. Carroll, E. G. Zweibel, C. J. Hansen, P. N. McDermott, M. P. Savedoff, J. H. Thomas, and H. M. Van Horn*. **305**, 767, 77-C9 (1986)
THOMPSON, LAIRD A. The A2197 and A2199 Galaxy Clusters: Erratum. *Stephen A. Gregory and Laird A. Thompson*. **305**, 580, 73-E8 (1986) (Orig. paper in **286**, 422, 127-F4)
TOHLINE, JOEL E. Dynamic Fission Instabilities in Rapidly Rotating $n = 3/2$ Polytropes: A Comparison of Results from Finite-Difference and Smoothed Particle Hydrodynamics Codes. *Richard H. Durisen, Robert A. Gingold, Joel E. Tohline, and Alan P. Boss*. **305**, 281, 70-B2 (1986)
TORRELLES, JOSÉ M. The Kinematic Temperature Gradient and the Structure of a Thin Molecular Disk in Cepheus A. *José M. Torrelles, Paul T. P. Ho, Luis F. Rodriguez, and Jorge Cantó*. **305**, 721, 76-F10 (1986)
TSURUTA, SACHIKO. Confronting X-Ray Observations of Young Supernova Remnants with Neutron Star Cooling Models. *Ken'ichi Nomoto and Sachiko Tsuruta*. **305**, L19, 74-B7 (1986)
TURNER, LEAF. Is Magnetic Energy the Source of Synchrotron Radiation in Jets? *Leaf Turner*. **305**, 668, 76-B11 (1986)

UHR, R. C. Searches for Narrow-Angle Anisotroies in the Primary Energy Range 0.1–10 TeV: Erratum. *O. C. Allkofer, W. D. Dau, H. Jokisch, G. Klemke, R. C. Uhr, G. Bella, and Y. Oren*. **305**, 954, 79-D10 (1986) (Orig. paper in **291**, 468, 40-A2)
UNWIN, S. C. see JONES, DAYTON L., *et al.*
URRY, C. M. X-Ray Spectroscopy of Five BL Lacertae Objects. *C. M. Urry, R. F. Mushotzky, and S. S. Holt*. **305**, 369, 71-C1 (1986)

VADER, J. PATRICIA. Metal-Enhanced Galactic Winds. I. *J. Patricia Vader*. **305**, 669, 76-B12 (1986)

VAN DEN HEUVEL, E. P. J. Magnetic Field Decay and the Origin of Neutron Star Binaries. *Ronald E. Taam and E. P. J. van den Heuvel*. **305**, 235, 69-E7 (1986)
VAN DER HUCHT, K. A. The Ultraviolet Spectrum of Procyon. I. The Atlas from 2030 to 2371 Å (Abstract of Paper in 1986 July Suppl.). *R. Faraggiana, F. Castelli, C. Morossi, Y. Kondo, and K. A. van der Hucht*. **305**, 956, 79-D12 (1986)
VAN DER ZWET, G. P. Shapes and Correlations as Observational Discriminants for the Origin of Diffuse Bands. *G. Chlewicki, G. P. van der Zwet, L. J. van Ijzendoorn, and J. M. Greenberg*. **305**, 455, 72-B5 (1986)
VAN GORKOM, J. H. Radio Observations of the 1985 Outburst of RS Ophiuchi. *R. M. Hjellming, J. H. van Gorkom, E. R. Seaquist, A. R. Taylor, S. Padin, R. J. Davis, and M. F. Bode*. **305**, L71, 80-D9 (1986)
VAN HORN, H. M. Oscillation Spectra of Neutron Stars with Strong Magnetic Fields. *B. W. Carroll, E. G. Zweibel, C. J. Hansen, P. N. McDermott, M. P. Savedoff, J. H. Thomas, and H. M. Van Horn*. **305**, 767, 77-C9 (1986)
VAN IJZENDOORN, L. J. Shapes and Correlations as Observational Discriminants for the Origin of Diffuse Bands. *G. Chlewicki, G. P. van der Zwet, L. J. van Ijzendoorn, and J. M. Greenberg*. **305**, 455, 72-B5 (1986)
VETTOLANI, G. On the Dependence of Far-Infrared and Radio Continuum Luminosities on Hubble Type in Spiral Galaxies. *G. Gavazzi, A. Cocito, and G. Vettolani*. **305**, L15, 74-B3 (1986)
VITTORIO, NICOLA. The Dynamical Evolution of Clusters of Galaxies. *Alfonso Cavaliere, Paolo Santangelo, Giuseppe Tarquini, and Nicola Vittorio*. **305**, 651, 76-A7 (1986)

WALBORN, NOLAN R. Ultraviolet and Visual Wavelength Spectroscopy of Gas around Eta Carinae. *Kris Davidson, Reginald J. Dufour, Nolan R. Walborn, and Theodore R. Gull*. **305**, 867, 78-D3 (1986)
WALKER, R. C. see JONES, DAYTON L., *et al.*
WEISSKOPF, M. C. Accretion onto Neutron Stars with the Presence of a Double Layer. *A. C. Williams, M. C. Weisskopf, R. F. Elsner, W. Darbro, and P. G. Sutherland*. **305**, 759, 77-C1 (1986)
WELCH, DOUGLAS L. The Distance to M31 from Infrared Photometry of Its Cepheids. *Douglas L. Welch, Christopher W. McAlary, Robert A. McLaren, and Barry F. Madore*. **305**, 583, 75-C1 (1986)
WELCH, WILLIAM J. A Cloud Collision Model for Water Maser Excitation. *J. C. Tarter and William J. Welch*. **305**, 467, 72-C4 (1986)
WHEATON, WM. A. The Gamma-Ray Spectrum of the Galactic Center Region: Erratum. *Guenter R. Riegler, James C. Ling, William A. Mahoney, Wm. A. Wheaton, and Allan S. Jacobson*. **305**, L33, 74-C6 (1986) (Orig. paper in **294**, L13, 71-E12)
WHEELER, J. C. Mass Transfer in Cataclysmic Variables: Clues from the Dwarf Nova Period Distribution. *A. W. Shafter, J. C. Wheeler, and J. K. Cannizzo*. **305**, 261, 69-G5 (1986)
WHITAKER, RODNEY W. Star Formation in Colliding Gas Flows. *James H. Hunter, Jr., Maxwell T. Sandford II, Rodney W. Whitaker, and Richard I. Klein*. **305**, 309, 70-D4 (1986)
WHITMORE, BRADLEY C. Is the Distribution of Mass within Spiral Galaxies a Function of Galaxy Environment? *David Burstein, Vera C. Rubin, W. Kent Ford, Jr., and Bradley C. Whitmore*. **305**, L11, 74-A13 (1986)
WILKINSON, P. N. see JONES, DAYTON L., *et al.*
WILLIAMS, A. C. Accretion onto Neutron Stars with the Presence of a Double Layer. *A. C. Williams, M. C. Weisskopf, R. F. Elsner, W. Darbro, and P. G. Sutherland*. **305**, 759, 77-C1 (1986)
WILLSON, ROBERT F. Millisecond Radio Spikes from the Dwarf M Flare Star AD Leonis. *Kenneth R. Lang and Robert F. Willson*. **305**, 363, 71-B9 (1986)
WILSON, A. S. Molecular Gas in the Type 1 Seyfert Galaxy NGC 7469: Implications for Nuclear Activity. *T. M. Heckman, S. Beckwith, L. Blitz, M. Skrutskie, and A. S. Wilson*. **305**, 157, 68-F2 (1986)
WITT, ADOLF N. Detection of Scattering in the 2175 Å Interstellar Band. *Adolf N. Witt, Ralph C. Bohlin, and Theodore P. Stecher*. **305**, L23, 74-B11 (1986)
WITZEL, A. see JONES, DAYTON L., *et al.*
WOOD, D. The Excitation, Abundance, and Distribution of HNCO in Sagittarius B2. *E. Churchwell, D. Wood, P. C. Myers, and Roy V. Myers*. **305**, 405, 71-E10 (1986)
WRIGHT, A. E. Absorption Spectrum of the $z = 3.78$ QSO 2000 − 330. I. The Lyman-Alpha Forest Region at 1.5 Å Resolution. *R. W. Hunstead, H. S. Murdoch, B. A. Peterson, J. C. Blades, D. L. Jauncey, A. E. Wright, M. Pettini, and A. Savage*. **305**, 496, 72-E8 (1986)

YEH, TYAN. Magnetic Structure of a Flux Rope. *Tyan Yeh*. **305**, 884, 78-E7 (1986)
YOUNG, J. S. Molecular Gas in High-Luminosity *IRAS* Galaxies. *D. B. Sanders, N. Z. Scoville, J. S. Young, B. T. Soifer, F. P. Schloerb, W. L. Rice, and G. E. Danielson*. **305**, L45, 80-B12 (1986)
YU, T. L. Experimental Evidence for the Effect of Resonance Structures on Electron Excitation Rates for Si III. *T. L. Yu, M. Finkenthal, and H. W. Moos*. **305**, 880, 78-E3 (1986)

ZAMORANI, G. X-Ray Observations of the Bright Quasar Survey. *H. Tananbaum, Y. Avni, Richard F. Green, Maarten Schmidt, and G. Zamorani*. **305**, 57, 67-E7 (1986)
ZDZIARSKI, A. ANDRZEJ. On the Origin of the Infrared and X-Ray Continua of Active Galactic Nuclei. *A. Andrzej Zdziarski*. **305**, 45, 67-D9 (1986)
ZHANG, E.-H. On the Discordant Measurements of the Radial Velocity Curve of the Late-Type Star in the Dwarf Nova SS Cygni. *Edward L. Robinson, E.-H. Zhang, and Richard J. Stover*. **305**, 732, 77-A1 (1986)
The Eclipses of Cataclysmic Variables. I. HT Cassiopeiae. *E.-H. Zhang, Edward L. Robinson, and R. Edward Nather*. **305**, 740, 77-A9 (1986)
ZWEIBEL, E. G. Oscillation Spectra of Neutron Stars with Strong Magnetic Fields. *B. W. Carroll, E. G. Zweibel, C. J. Hansen, P. N. McDermott, M. P. Savedoff, J. H. Thomas, and H. M. Van Horn*. **305**, 767, 77-C9 (1986)